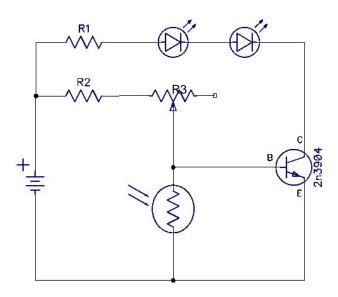
## **Breadboard Lab #7**

## "How an Automatic Night Light works"

1) Breadboard the following schematic diagram. Make sure your wires are flat! Set the Power Supply to 9 volts.



R1: 56 ohm (green, blue, black)
R2: 10K ohm (brown, black, orange)
R3: 50k or 100k Potentiometer

- 2) Use the Potentiometer to adjust the **sensitivity** of the circuit so that when you pass your hand over something happens.
- 3) Answer the following questions. Use the <u>Electronic Components PowerPoint</u> <u>presentation</u> from class to help.
  - a) When the light hits the photocell the LED's are \_\_\_\_\_.
  - b) The less light on the photocell, the \_\_\_\_\_ the LED's are.
  - c) The LED's are connected to the \_\_\_\_\_ of the transistor.
  - d) The potentiometer is used to adjust the \_\_\_\_\_ of the device.

<sup>□</sup> Mr. Claassen□ Revised Fall 2017